



MONTANA VETERINARY DIAGNOSTIC LABORATORY

1911 WEST LINCOLN, BOZEMAN, MT 59718
P.O. Box 997, BOZEMAN, MT 59771
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EMAIL: livdiagnosticlab@mt.gov



PATRICK RYAN CLARKE D.V.M.
PO BOX 202001
HELENA MT 59601

CASE: 17-15227
Name/ID: Green 03
Species: American Bison

FINAL REPORT 10/07/17

Sex: Female **Age:** 8 Years
County: Park
Owner: USDA,APHIS,VS - GonaCon

Accessioned: 04/03/17
Authorized by: SS

Previous Reports
10/10/17
10/10/17

CASE SUMMARY

Verified on: 10/07/17 by: SS

REASON FOR SUBMISSION:

Dystocia and lymph node collection

LABORATORY DIAGNOSIS:

Fetal pneumonia with bacteria

COMMENT:

Histologic evaluation of tissues from these animals confirms the presence of the fetal pneumonia, with associated bacterial, and culture basal fluid reveals mixed populations of organisms, some of which may have been associated with the observed lesions. No additional changes were noted, and in-house Brucella culture was negative.

Stephen K. Smith, DVM, Diplomate, ACVP

PATHOLOGY

Verified on: 10/07/17 by: SS

GROSS DESCRIPTION:

Examined are the carcasses of an adult female bison and a male bison fetus with a crown rump length of 33 cm, following dystocia and euthanasia. Samples were collected for Brucella culture, but sent to NVSL by the submitter.

HISTOLOGIC DESCRIPTION:

A selection of fetal and material tissues are examined, some of which are characterized by post-mortem autolysis and bacterial overgrowth.

Fetal lung. Scattered throughout alveolar air spaces are occasional aggregates of neutrophils, associated with cell debris, squamous epithelial cells and bacteria.

All of the following tissues are examined histologically, and contain no significant microscopic changes: kidney, skeletal muscle, spleen, tongue, diaphragm, thymus, small intestine, abomasum, colon, uterus, brain, and liver.

HISTOLOGIC DIAGNOSIS:

Fetal pneumonia with bacteria.

CLINICAL MICROBIOLOGY

Tritrichomonas foetus Culture Verified on: 04/10/17 by: JR

Animal ID	Specimen	Isolate #	Organism	Amount
Green 03	Abomasal Fluid		Negative for Tritrichomonas foetus	

Brucella Culture Verified on: 04/14/17 by: JR

Animal ID	Specimen	Isolate #	Organism	Amount
Green 03	Abomasal Fluid		Negative for Brucella sp.	

Campylobacter Culture Verified on: 04/10/17 by: JR

Animal ID	Specimen	Isolate #	Organism	Amount
Green 03	Abomasal Fluid		Negative for Campylobacter sp.	

Aerobic Culture Verified on: 04/05/17 by: KK

Animal ID	Specimen	Isolate #	Organism	Amount
Green 03	Abomasal Fluid	1	Mixed enteric organisms present Mixed enteric organisms including Escherichia coli, and Enterococcus sp.	3+

FEES:

Tritrichomonas foetus Culture	0.00
Case Summary	0.00
Brucella Culture	0.00
Campylobacter Culture	0.00
Aerobic Culture	0.00
Hematoxylin & Eosin	0.00
Necropsy LA >500#	157.50
Incineration per pound	260.00
Total	417.50

(This is not a bill. Do not make payments from this report.)

Study Title	Species	Location	Current Animal Numbers and Brucellosis status
Evaluation of GonaCon™, an immunocontraceptive vaccine, as a means of decreasing shedding of <i>Brucella abortus</i> in bison (Cohort 1)	Bison	Bison Quarantine Facility, Corwin Springs, MT	Seropositive: 29 Seronegative: 12
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Identification of imprinted genes in the bovine trophoblast and rescuing bison genetics	Bison	WiLDIT Wildlife Research Facility, Fort Collins, CO	Seropositive: 11 Seronegative: 13
Bison Conservation	Bison	WiLDIT Wildlife Research Facility, Fort Collins, CO	Seronegative: 23
Natural transmission of <i>Brucella abortus</i> to naïve elk in a paddock via exposure to potentially <i>Brucella abortus</i> -infected elk fetuses and to naturally-infected elk in a paddock; demonstration of a natural transmission model	Elk	WiLDIT Wildlife Research Facility, Fort Collins, CO	Seropositive: 22 Seronegative: 23
Inactivated <i>Mycobacterium bovis</i> vaccine in feral swine	Feral Swine	WiLDIT Wildlife Research Facility, Fort Collins, CO	Breeding herds Molokai-seronegative: 8 Texas-seronegative: 13

What is status of the

no 8

This permit identifies restricted animals moved for quarantine/slaughter purposes. The information is needed to identify disease infected/exposed animals that are moved to specific locations in order to control and prevent spread of the disease (9 CFR 71 through 85). See reverse side for additional information.

U.S. DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
VETERINARY SERVICES

FORM APPROVED
OMB NO. 0579-0051

No. F101899

5. STATE WHERE ISSUED MT

6. MOVEMENT TO BE ☒ INTERSTATE ☐ INTRASTATE

7. MOVEMENT FOR ☒ QUARANTINE ☐ SLAUGHTER

8. DISEASE Brucellosis

9. STATUS OF ANIMALS
No. Reactor 1 No. Exposed 6 No. Other (Specify)

10. STATUS OF HERD OF ORIGIN Infected

11. STATUS OF AREA OF ORIGIN DSA

12. NO. ANIMALS IN THIS SHIPMENT 7

13. SPECIES (one only) Bison

14. TRANSPORTATION VEHICLE LICENSE NO. OR OTHER IDENTIFICATION NO. A312951

15. SEAL NO. 3785250
3785251

16. VEHICLE REQUIRED TO BE CLEANED AND DISINFECTED AT DESTINATION
☐ YES ☒ NO
(If Yes, Items 32, 33, and 34 are Applicable)

VALID ONLY FOR ABOVE DESTINATION

17. ANIMALS TO BE MOVED

COMPLETE EAR TAG NO.	BREED	SEX	DISEASE BRAND	OTHER IDENTIFICATION (Complete No.)	COMPLETE EAR TAG NO.	BREED	SEX	DISEASE BRAND	OTHER IDENTIFICATION (Complete No.)
<u>81AJW3757</u>	<u>Bis</u>	<u>M</u>	<u>N/A</u>	<u>Red 69</u>					
<u>81AJW3760</u>				<u>Red 65</u>					
<u>81AJW3774</u>				<u>Red 61</u>					
<u>YNP930781</u>				<u>Red 63</u>					
<u>YNP930786</u>				<u>Red 66</u>					
<u>YNP930797</u>				<u>Red 59</u>					
<u>YNP930798</u>				<u>Red 62</u>					

I certify that I have inspected the animals described on this permit and find them eligible to move in accordance with the requirements of State and Federal regulations.

18. SIGNATURE OF INSPECTOR [Signature]

19. DATE ISSUED Aug 22, 14

20. TIME ISSUED 7:00 AM

21. DATE Aug 23, 2014

22. TIME 7:00 AM

VOID AFTER

WARNING TO OWNER, SHIPPER AND TRUCKER - LIVESTOCK MUST BE DELIVERED TO CONSIGNEE WITHOUT DIVERSION
I understand that it is a violation of Federal law to move the animals identified herein interstate except in accordance with the provisions of applicable Federal Regulations. I also understand that such animals must comply with existing state laws and regulations governing movement of livestock and poultry. I have arranged or will arrange for a copy of this permit to accompany the interstate shipment and be delivered with the above described animals.

23. SIGNATURE OF OWNER OR SHIPPER [Signature]

24. TITLE ☒ OWNER ☐ SHIPPER

25. DATE SIGNED 22 Aug 2014

I certify that the animals described on this permit were received and slaughtered/quarantined in accordance with the requirements of the State and Federal regulations on the date indicated in item 29.

26. PLACE ANIMALS RECEIVED VS Bison Pens

27. DATE ANIMALS ARRIVED 8/22/14

28. NO. ANIMALS RECEIVED 7

29. DATE SLAUGHTERED/QUARANTINED

30. DATE AND TIME SEALS BROKE

31. AUTHORIZED SIGNATURE

32. DATE CLEANED AND DISINFECTED (if)

33. SIGNATURE OF INSPECTOR

34. DATE SIGNED

Bison Brucella VOC Study 2013
Breath Samples from Bison Participating
in Gonacon Study
Sampling Date: January 8-9, 2013

ID	Brucella Status	Treatment Group	Site	GnRH titer	Pregnancy Status	Intensity of reaction on Serology
R08	Postive	control	1	0	Pos	
R09	Postive	control	1	0	Neg	
R13	Postive	control	1	0	Pos	
R15	Postive	control	1	0	Neg	
R19	Postive	vax	2	128	Neg	
R20	Postive	vax	2	128	Pos	
R22	Postive	control	1	0	Pos	
R24	Postive	vax	2	0	Pos	
R27	Postive	vax	2	128	Neg	
R28	Postive	vax	2	128	Neg	
G2	neg	Sentinel	2	0	Pos	NA
G3	neg	Sentinel	2	0	Pos	NA
G4	neg	Sentinel	2	0	Neg	NA
G6	neg	Sentinel	2	0	Neg	NA
G8	neg	Sentinel	1	0	Pos	NA
G9	neg	Sentinel	1	0	Pos	NA
G10	neg	Sentinel	1	0	Pos	NA
G14	neg	Sentinel	1	0	Pos	NA
G15	neg	Sentinel	1	0	Pos	NA

Site 1 =Slip n Slide

Site 2 = Rigler's



MVDL

MONTANA VETERINARY DIAGNOSTIC LABORATORY

PO Box 997 Bozeman, MT 59771
1911 West Lincoln Street Bozeman, MT 59718
Website: www.liv.mt.gov/lab

Phone: (406) 994-4885
Fax: (406) 994-6344
Email: livdiagnosticlab@mt.gov

Accession # 8-396-15

Owner: USDA/APHIS/VS

Species: WILD - BISON

Breed: BISON

Name/No. 5R09

Age: NEWB(Sex:

Date Sent: 05/15/2015

Date Received: 05/04/2015

Submitter: PATRICK RYAN CLARKE D.V.M.

(b) (6)

Final Report

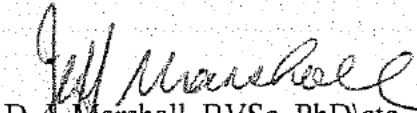
Case Coordinator: JM

CASE SUMMARY

5/15/15

ADDITIONAL INFORMATION:

BACTERIOLOGY: The Brucella isolate was confirmed as Brucella abortus by identification testing at NVSL (see attached report).


D. J. Marshall, BVSc, PhD\cto

ADDITIONAL INFORMATION 5/13/15:

BACTERIOLOGY: Brucella sp was isolated from this calf. The isolate has been forwarded to NVSL for further identification procedures. Results will be forwarded as soon as available.

D. J. Marshall, BVSc, PhD/mmm

5/11/15

REASON FOR SUBMISSION: Bison calf abortion

LABORATORY DIAGNOSIS:

Bison calf abortion

COMMENT: Results of bacteriological investigations will be reported as soon as complete.

D. J. Marshall, BVSc, PhD\cto

Date In 05/04/2015

PATHOLOGY

Date Out: 05/11/2015

Released by: JM

GROSS PATHOLOGY: A bison calf (ID 5R09) was submitted for necropsy. Necropsy is performed at 11 am 4th May 2015. Calf is autolyzed and predated. Sex could not be determined. Crown rump length measured 76 cm. Only a small portion of brain, lung and skeletal muscle was available for examination. Brain was severely autolyzed and not sampled.

HISTOPATHOLOGY: Sections of lung and skeletal muscle are examined. Lung is severely autolyzed and not useful for diagnostic purposes. No significant abnormality is detected in skeletal muscle.

MORPHOLOGIC DIAGNOSIS:

Lung: Autolysis

Date In 05/04/2015

BACTERIOLOGY

Date Out: 05/15/2015

Released by: mh

Isolate to be sent to NVSL for full identification 5/12/15.

CULTURES

<u>ID/Site</u>	<u>Specimen</u>	<u>Culture Type</u>	<u>Isolate</u>	<u>Growth</u>	<u>Antimicrobial Profile</u>
	fetal lung	Campylobacter	Negative for Campylobacter sp.		NA
	fetal lung	Aerobic	A mixed culture of non-pathogenic bacteria	2+	NA
	fetal lung	Brucella	Brucella abortus	3+ M	NA

1+ to 4+ = rare colony to confluent growth

1 = pure culture, M = mixed or partially contaminated culture

Date In: 05/11/2015

REFERRAL/OTHER

Date Out: 05/15/2015

Released by: JM

<u>Animal ID</u>	<u>Specimen</u>	<u>Test</u>	<u>Result</u>	<u>Rfrrl Inst.</u>
5R09	Slant Tube	Brucella Culture	See attached report	NVSL

Please see attached report for complete results.



National Veterinary Services Laboratories

PO Box 844

Ames, Iowa 50010

Phone: 515-337-7514 Fax: 515-337-7938

FEDERAL RELAY SERVICE (Voice/TTY/ASCII/Spanish) 1-800-877-8339

The USDA is an equal opportunity provider and employer.

FINAL REPORT

Laboratory Test Report

Sensitive But Unclassified/Sensitive Security Information - Disseminate on a Need-To-Know Basis Only

Owner

USDA, APHIS, VS
Corwin Springs, MT

Animal Location

Park County MT

Submitter - 2047

MT Department of Livestock
Diagnostic Laboratory Division
1911 W Lincoln St
PO Box 997
Bozeman, MT 59718
FAX #: 406-994-6344
Phone #: 406-994-4885

Accession Number:

15-015494

Date Collected:

05/02/2015

Date Received:

05/13/2015

Date Completed:

05/15/2015

Collected By:

Dr. Patrick Ryan Clarke

Purpose:

General Diagnostic

Referral Number:

8-396-15

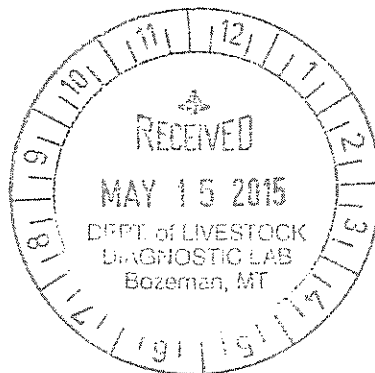
This is not a billable case.

NOTE: Condition of the sample(s) was adequate unless otherwise noted.

Sample: 8-396-15 Animal ID: 5R09 Brucella Case Number: B15-0160 Specimen Type: Culture Species: Bison

Brucella Final Identification

Brucella abortus



Results authorized by:

Dr. Suelee Robbe-Austerman, Section Head, Mycobacteria and Brucella Section
NVSL MB General Phone: 515-337-7388

Scanned 5-15-15

Help Us Help You

(This new section will be updated periodically with tips for submitters.)

Quality samples yield the most accurate results. Please call if you have questions.

Fees

Bacteriology Fee	\$ 0.00
Pathology/Histology Fee	\$ 73.50
Referral Fee	\$ 19.10
Accession Total Fee	\$ 92.60

(This is not a bill. Do not make payment from this report.)

Best Copy Available

FOIA Requests ▸ Bison Data for Serum Labels.xlsx

Microsoft Excel Web App

Perry, Robbie T - APHIS | ? ✕

FILE

EDIT WORKBOOK

DATA

FIND

	A	B	C	D	E	F	G	H	I	J	K	L
1	PROJECT	BANGLE TAG	DATE	SAMPLE								
2	MT Bison GonaCon	Green 02	01/12-14/2016	Serum								
3	MT Bison GonaCon	Green 03	01/12-14/2016	Serum								
4	MT Bison GonaCon	Green 04	01/12-14/2016	Serum								
5	MT Bison GonaCon	Green 06	01/12-14/2016	Serum								
6	MT Bison GonaCon	Green 17	01/12-14/2016	Serum								
7	MT Bison GonaCon	Red 01	01/12-14/2016	Serum								
8	MT Bison GonaCon	Red 02	01/12-14/2016	Serum								
9	MT Bison GonaCon	Red 04	01/12-14/2016	Serum								
10	MT Bison GonaCon	Red 05	01/12-14/2016	Serum								
11	MT Bison GonaCon	Red 11	01/12-14/2016	Serum								
12	MT Bison GonaCon	Red 14	01/12-14/2016	Serum								
13	MT Bison GonaCon	Red 19	01/12-14/2016	Serum								
14	MT Bison GonaCon	Red 23	01/12-14/2016	Serum								
15	MT Bison GonaCon	Red 27	01/12-14/2016	Serum								
16	MT Bison GonaCon	Red 28	01/12-14/2016	Serum								
17	MT Bison GonaCon	Red 29	01/12-14/2016	Serum								

◀ ◁ ▷ ▶

Sheet1

001398

Study Title	Species	Location	Current Animal Numbers and Brucellosis status
Evaluation of GonaCon™, an immunocontraceptive vaccine, as a means of decreasing shedding of <i>Brucella abortus</i> in bison (Cohort 1)	Bison	Bison Quarantine Facility, Corwin Springs, MT	Seropositive: 29 Seronegative: 12
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